

EC-2
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8, MONTANA OFFICE
FEDERAL BUILDING, 301 S. PARK, DRAWER 10096
HELENA, MONTANA 59626-0096



Ref: 8MO

January 20, 1999

Mr. Edward C. Monnig, District Ranger
Fortine Ranger District
P.O. Box 116
Fortine, MT 59918

Re: Swamp Draft Environmental Impact
Statement

Dear Mr. Monnig:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the Environmental Protection Agency, Region VIII, Montana Office (EPA) reviewed the above-referenced Draft Environmental Impact Statement (DEIS).

The EPA is supportive of the purpose of the proposed Swamp Timber Sales project to manage for a diversity of plant communities and age classes to meet the habitat requirements for a variety of plant and animal species, and to manage for stable stream channels and productive aquatic habitat, and to provide timber to the local economy. We are pleased that the action alternatives incorporate road reconstruction (61.5 miles) and road abandonment and obliteration (16 miles) to improve the effects of the road system upon watersheds. The roads to be reconstructed, abandoned or obliterated have been identified as a primary source of elevated sediment levels in many watersheds in the analysis area. We also want to state that the vegetation/disturbance ecology and the water quality impact analyses and water quality monitoring plan in the DEIS are well presented.

The EPA does not object to the Forest Service's preferred alternative, Alternative B1. However, we do want to state that the EPA considers Alternative D to be the environmentally preferable alternative due to its increased emphasis upon wildlife habitat and security and maintenance of large tree structure in past seedtree and shelterwood harvest units, and an age class distribution favoring mature interior forest, including the mature grand fir community.



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We are pleased that the Forest Service is coordinating their proposed timber and road management activities in the Edna and Swamp Creek drainages (listed as threatened or impaired by the State of Montana), with the Montana Department of Environmental Quality (MDEQ). The MDEQ will have to prepare Total Maximum Daily Loads (TMDLs) for these listed streams, and it is important that Forest Service land management activities be consistent with the MDEQ's TMDL development.

We note that approximately 20% of the land in the Swamp, Edna, and Fortine Creek watersheds are comprised of private lands, and it is stated on page III-51 of the DEIS that aquatic conditions on private lands are expected to remain in a generally degraded condition or possibly decline further. The State's TMDL development will need to consider water quality effects of land management activities on both public and private land.

We also want to thank Forest Service staff for coming to Helena on January 14, 1999 to describe and discuss proposed Swamp Timber Sale Project activities and environmental analyses with MDEQ and EPA staff. Those discussions were very helpful. The EPA's additional comments and questions regarding the analysis, documentation, or potential environmental impacts of the Swamp project are included in the enclosure with this letter.

Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action and alternatives in an EIS, the Swamp DEIS has been rated as Category EC-2 (Environmental Concerns - Insufficient Information). The EPA's concerns regard our belief that Alternative D would be environmentally preferable to the Forest Service's preferred alternative. We also note that there may be potential short-term risks to Swamp and Edna Creeks (listed as threatened or impaired by the State of Montana) from proposed timber harvest and road construction/reconstruction (albeit low risk). We are pleased, however, that the long-term conditions of Swamp and Edna Creeks are likely to improve as a result of road program improvements proposed by the Forest Service, and we fully support those improvements. A copy of EPA's rating criteria is attached.

The EPA appreciates the opportunity to review and comment on the DEIS. If we may provide further explanation of our concerns please contact Mr. Steve Potts of my staff in Helena at (406) 441-1140 ext. 232. Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "John F. Wardell", with a long horizontal line extending to the left.

John F. Wardell
Director
Montana Office

Enclosure

cc: Cindy Cody, EPA, 8EPR-EP, Denver

Virginia Rose, EPA, 8EPR-EP, Denver
Clifford Walker, USFS R-1, TCFPM, Missoula
Ann Puffer, USFS R-1, RAWF, Missoula
Stuart Lehman/Roxanne Lincoln, MDEQ, Helena

EPA Comments on the Swamp Draft Environmental Impact Statement

Brief Project Overview

The Fortine Ranger District of the Kootenai National Forest has analyzed four alternatives including a no action alternative to manage a diversity of plant communities, provide timber to the local economy and manage for stable stream channels and productive aquatic habitat in the Swamp Analysis Area in the Salish Mountains south of Eureka, Montana. The Swamp Analysis Area occupies approximately 50,900 acres, including 40,683 national forest and 10,252 acres of private land.

Alternative A is the no action alternative that provides a basis of comparison with the action alternatives. The proposed action, Alternative B, emphasizes the salvage of beetle killed lodgepole pine and wind thrown trees. Alternative B would harvest approximately 14,563 MBF of timber over 4,716 acres. Slow growing trees were identified for regeneration harvest, and crowded stands were identified for commercial thinning. Actions included considered concerns for patch size, large tree structure, and age class distribution within forest groups. No new permanent road construction is proposed, and 61.5 miles of road reconstruction and 2.3 miles of temporary road are proposed. Two road management options were proposed: option 1 with year long road restrictions (24.4 miles of road restrictions) to improve or maintain wildlife security; and option 2 with no additional road restrictions. Alternative B1 is the preferred alternative.

Alternative C was designed to emphasize long term timber productivity and extend the existing transportation system. It emphasizes the salvage of beetle killed lodgepole pine and pockets of wind thrown trees, placing less emphasis upon large tree structure and age class distribution within forest groups. Alternative C would harvest approximately 18,669 MBF of timber on 5,120 acres. A total of 4.5 miles of new permanent road construction is proposed, and 61.5 miles of road reconstruction and 1.1 miles of temporary road are proposed. Alternative C would include the option 1, year long road restrictions of Alternative B. Crowded stands of timber are proposed for commercial thinning.

Alternative D reduces the amount of acres and size of openings of regeneration harvest, and emphasizes wildlife habitat and security, maintaining large tree structure and mature trees. Alternative D defers harvest in a mature grand fir community, which is scarce within the Swamp area. Alternative D would harvest 11,840 MBF on 4,154 acres. Less emphasis is given to salvage of beetle killed lodgepole pine. No new permanent road construction was proposed, and 61.5 miles of road reconstruction and 2.3 miles of temporary road are proposed. Alternative D would include 20.4 miles of year long road restrictions, and 1.7 miles of seasonally restricted roads. A total of 16 miles of road would be abandoned or obliterated in Alternatives B, C and D.

Comments:

Alternatives

1. It appears to EPA that Alternative D would be the environmentally preferred alternative due to its emphasis upon wildlife habitat and security and maintaining large tree structure in past seedtree and shelterwood harvest units, and an age class distribution favoring mature interior forest, including the mature grand fir community. The EPA supports the 20.4 miles of year long road closures and 1.7 miles of seasonally restricted roads proposed for Alternative D. Although we believe Alternative D is environmentally preferred, we do not object to the Forest Service's preferred alternative, Alternative B. We support option 1 road closures for Alternatives B. We also fully support the road abandonment and obliteration planned for all three action alternatives (16 miles of road).
2. We believe it would be helpful if a summary table showing a comparison of Alternatives with respect to "environmental impacts" were included in the FEIS to facilitate and improve comparative evaluation of the environmental impacts of the alternatives. We note that the CEQ Regulations 40.CFR1502.14 state that the EIS should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public. Perhaps, Table II-8 - Comparison of Alternatives by Purpose and Need, (pg. II-19) could be amended to include environmental impacts, or an additional table could be added to present a summary of environmental impacts by alternative.

Water Quality

3. We are pleased that all action alternatives propose to improve watershed conditions within the Edna and Swamp Creek watersheds (page III-49), although we believe that some short-term risks of impacts to water quality are likely to occur during timber harvest and road construction and reconstruction. We are pleased that the action alternatives incorporate road reconstruction (61.5 miles) to improve the effects of the road system upon watersheds (i.e., adding culverts, drainage dips, ditches where needed, out-sloping or improving road surfaces, replacing undersized culverts, and improving stream crossings, etc.), particularly since the roads to be reconstructed, abandoned or obliterated have been identified as a primary source of elevated sediment levels in many watersheds in the analysis area Page III-61). We are also pleased that 16 miles of roads that are no longer needed would be abandoned and obliterated. The water quality impact analysis in the DEIS is well presented.
4. We are pleased that the Forest Service recognizes that Swamp, Fortine, and Edna Creeks are listed as a water quality limited streams (WQLSs) by the Montana Department of Environmental Quality (MDEQ), and is coordinating proposed activities in these watersheds with the MDEQ's need to develop Total Maximum Daily Loads (TMDL) for these listed streams.

The TMDL process identifies the maximum load of a pollutant (e.g., sediment, nutrient, metal) a waterbody is able to assimilate and fully support its designated uses; allocates portions of the maximum load to all sources; identifies the necessary controls that may be implemented voluntarily or through regulatory means; and describes a monitoring plan and associated corrective feedback loop to insure that uses are fully supported. It is important for the Forest Service to coordinate proposed activities within WQLS watersheds with the MDEQ (i.e., Stuart Lehman at 444-5319 in Helena) to ensure MDEQ concurrence on proposed activities in these drainages with the MDEQ's TMDL requirements.

We note that approximately 20% of the land in the Swamp, Edna, and Fortine Creek watersheds are comprised of private lands, and it is stated on page III-51 of the DEIS that aquatic conditions on private lands are expected to remain in a generally degraded condition or possibly decline further. We note that TMDLs will need to consider water quality effects of land management activities on both public and private land.

5. The DEIS states that the stream reaches with poorest stability and least quality aquatic habitat tend to occur where there has been regeneration harvest in riparian areas (page III-45). The effects of riparian harvest are stated to include channel widening, lack of large woody debris, higher mid-summer water temperatures, high percentage of fine sediments, and a lack of deep pools. The EPA agrees with these observations. We are pleased that no equipment operation or regeneration harvest will occur within identified Riparian Habitat Conservation Areas (RHCAs, page III-49). While the DEIS states that no regeneration harvest will occur in RHCAs, we ask if any timber harvest is proposed in riparian or wetland areas? We encourage the Forest Service to delineate and mark the RHCAs and perennial seeps and springs and wetlands on maps and on the ground before harvesting so that timber contractors will be able to avoid them.

6. We are pleased that all the action alternatives propose some level of riparian/wetland improvement (page III-50). Are these improvements primarily a result of excluding grazing from sensitive riparian areas or wetlands?

7. We appreciate inclusion of the water quality monitoring plan in Appendix C of the DEIS. This plan provides a good description of monitoring objectives and a summary of the methodology used to plan and design a monitoring plan.

Air Quality

8. We recommend that a windrose be included in the - Air Quality - Affected Environment section (page III-16) to give the public an understanding as to what the prevailing winds are for this area.

9. It is stated on page III-18, second paragraph, - "A complete list of potential Class 1 airsheds, nonattainment areas, and local communities which may be affected by smoke from the project area is located in the project file." We believe that a summary of the local communities

and nonattainment areas which may be affected by smoke be provided in the final EIS so that the public will have knowledge as to which communities may have air quality effects. The CEQ regulations (40 CFR 1502.21) indicate that agencies should incorporate material into an EIS by reference only when it does not impede agency and public review of the action.

We also believe monitoring of activities for impacts upon air quality will be beneficial to improving understanding. We encourage you to develop an air quality monitoring plan to help you establish a quantitative and qualitative understanding of the impacts to air quality. Such a monitoring plan would also help to validate quantitative predictions for future activities. Careful scheduling of the many burning activities to coincide with proper climatological and meteorological conditions will be necessary to avoid air quality problems.

10. Table III-7, PM₁₀ Emissions by Method of Treatment. The PM₁₀ emissions are incorrect according to the emission factors presented in the paragraph above the table. The PM₁₀ emissions shown in the table are actually the tons of fuel available for burning. To calculate the PM₁₀ emissions, the tons of fuel available for burning needs to be multiplied (for underburning) by 23 lbs x 1 ton/2000 lbs. An example for underburning is (788 acres (Alternative B) x 12 tons/acre x 23 lbs/ton x 1 ton/2000lbs = 108.7 tons). If you have questions regarding these calculations please contact our air quality specialist, Mr. Robert Edgar with the EPA Denver Regional Office at 303-312-6669.

11. We suggest that for air quality impacts, the corrected PM₁₀ emissions shown in Table III-7 (page III-18) be used in a summary table presenting comparative environmental impacts of Alternatives (see comment no.2 above).